## (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 22 September 2005 (22.09.2005)

PCT

### (10) International Publication Number WO 2005/088328 A2

(51) International Patent Classification7:

G01R 33/20

(21) International Application Number:

PCT/IB2005/050681

(22) International Filing Date: 24 February 2005 (24.02.2005)

(25) Filing Language:

(26) Publication Language: English

(30) Priority Data:

04100799.8 1 March 2004 (01.03.2004) EP

- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): HARVEY, Paul, R. [GB/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). KRUGER, Luc, R. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). SLEGT, Sander [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (74) Agents: COHEN, Julius, S. et al.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

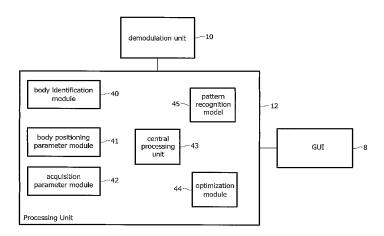
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Declaration under Rule 4.17:**

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

[Continued on next page]

#### (54) Title: ALL IN ONE PLAN SCAN IMAGING FOR OPTIMIZATION OF ACQUISITION PARAMETERS



(57) Abstract: The present invention provides a magnetic resonance imaging system making use of low resolution, whole-body plan scan image of a body. The whole-body plan scan image is exploited to gather a plurality of individual information of a body that is essential for an optimization of acquisition parameter for acquisition of a high resolution and high quality image of a region of interest of the body. Moreover, the whole-body plan scan image is used in order to facility a determination and a selection of a region of interest to be performed by an operator. Additionally, the MRI provides effective means for autonomously identifying specific body parts or even organs of a patient. Providing the entire information that can be extracted from the whole-body plan scan image to the operator effectively simplifies the workflow of the operator in an intuitive way. Preferably, during acquisition of the low resolution whole-body plan scan image, necessary calibration parameters for acquisition of the final high resolution image are obtained.



# WO 2005/088328 A2

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

#### **Published:**

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.